

CUSTOM WAFER FABRICATION SERVICES

Custom Silicon Foundry

Mitel Semiconductor occupies a respected position in today's fast-paced, highly competitive world of custom silicon devices. Our silicon foundry services and capabilities are truly world-class, supported by an experienced consulting team in the design, fabrication, packaging and testing of the state-of-the-art digital, analog and mixed-signal integrated circuits.

To meet the rapidly changing needs of our customers, Mitel provides a highly flexible and responsive service. To that end, our engineering staff will work with the customer from the difficult phase of prototyping through to full circuit production. We are committed to this support due to its importance for timely product introductions in highly competitive markets; because prototype of today will become the volume product of tomorrow.

Designs Inputs

The Mitel Custom Silicon Foundry accepts customers designs in GDSII and CIF formats. If required, engineering support is available to convert tooling from an existing foundry to Mitel standards. We can provide the electrical parameters required to generate new designs or for comparison with existing designs.

Prototyping

Mitel provides outstanding services where prototype delivery, production cycle time and process flexibility are our strong points. With our ProToDuction™ prototype program, we can provide packaged samples within 9 weeks at a competitive price. The cost of ProToDuction is comparable to that of shared wafers for similar chip sizes. ProToDuction has two distinct advantages. There is no fixed starting schedule to watch for and all the devices on the ProToDuction wafers belong to the customer. Our process flexibility is also quite unique where we can adjust our processes to match your circuit requirements. ProToDuction is offered on our 1.2, 1.5 and 2.0 μm processes.

Packaging

We offer in-house packaging services to meet fast turnaround prototype requirements.

Cost-effective, timely solutions

The Mitel Semiconductor team approach to silicon foundry services is the path to satisfaction. Whether customer has his own design resources and facilities, wants to utilize outside third-party design expertise, or is simply seeking a second source, then Mitel Semiconductor is the custom foundry to provide cost-effective and timely silicon.

Customer Service

Mitel views customer service as being an important aspect of our wafer foundry business. The Customer Service Group prides itself on the availability of timely information about the position and forecasted due-out date of foundry wafers. Whether by telephone or electronic mail, customers are kept well informed about the progress of their wafers as they move through the fabrication process.

Why select Mitel Semiconductor for your custom wafers?

Mitel Semiconductor Custom Silicon Foundry provides the very best in service, product quality, and cost-effective manufacturing available in the industry today. Here are a few guiding principles about our services.

Ultimate Flexibility

Very tight design rules allow us to accommodate almost any customer requirement. If not, then we have the flexibility to make the necessary process adjustments to match any of the wide variety of Mitel CMOS processes presently in use or under development.

Mixed Signal Expertise

Our processing capability draws on nearly twenty years' experience in building mixed analog/digital CMOS circuits. You can be confident in our understanding of the special requirements of analog designs.

Custom Wafer Fabrication Services

Delivering on Quality

Mitel Semiconductor uses statistical process control for real time monitoring of all silicon manufacturing operations. The result is exceptional quality and consistency high yield performances. Mitel Semiconductor is an ISO-9001 and ISO-9002 registered company.

Confidentiality

Mitel operates in the strictest of confidence with all our customers. We guarantee confidentiality that ensures a customer's design will remain his design.

Superb Engineering Support

Our design and technical consultant teams are available at any time to assist customers in choosing the proper process family for their application and to help in other technical support areas.

Stringent Design Rules

Because we manufacture to tighter design rules than most suppliers, we have a high degree of confidence that we can build a design exactly as a customer wants it.

Small Volume-Friendly

No matter what the size of production, we will accommodate customer requirements. Our processing and support systems are structured to provide the service needed whether volumes are large or small.